

OIL CONSERVATION COMMISSION
1000 Rio Brazos Rd.
Aztec, New Mexico

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

DATE 4-2-60

RE: Proposed NSP _____

Proposed NSL _____

Proposed NFO _____

Proposed DC ✓

Gentlemen:

I have examined the application dated 3-28-60

for the _____

Operator

Lease and Well No.

S-T-R

and my recommendations are as follows:

approve as submitted

Yours very truly,

Emory C. Lane
OIL CONSERVATION COMMISSION

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name Blanco M. V. Ext. & So. Blanco Dak. Ext.		County Rio Arriba	Date March 20, 1960
Operator El Paso Natural Gas Company		Lease Rincon Unit	Well No. 130 (MD)
Location of Well A	Unit 32	Township 27N	Range 6W

1. Has the New Mexico Oil Conservation Commission heretofore authorized the dual completion of a well in these same pools or in the same zones within one mile of the subject well? YES _____ NO X
2. If answer is yes, identify one such instance: Order No. _____; Operator, Lease, and Well No.:

3. The following facts are submitted:	Upper Zone	Lower Zone
a. Name of reservoir	Mesa Verde	Dakota
b. Top and Bottom of Pay Section (Perforations)	5368-5520	7394-7490 (Ganeros)
c. Type of production (Oil or Gas)	Gas	Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing	Flowing

4. The following are attached. (Please mark YES or NO)

- Yes a. Diagrammatic Sketch of the Dual Completion, showing all casing strings, including size and setting, top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
- Yes b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- No c. Waivers consenting to such dual completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*
- No d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

Southern Petroleum Exploration Co., Box 192 Sistersville, West Virginia

***R. E. Mend, 3333 Republic National Bank Building, Dallas 1, Texas**

***Culkins Oil Company, 1130 First National Bank Building, Denver 2, Colorado**

***Waivers to be sent to Santa Fe under separate cover.**

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO _____. If answer is yes, give date of such notification 5-28-60.

CERTIFICATE: I, the undersigned, state that I am the Division Petroleum Engr. of the El Paso Natural Gas Co. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

ORIGINAL SIGNED E. S. OBERLY

Signature

- * Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.
- NOTE: If the proposed dual completion will result in an unorthodox well location and/or a non-standard perforation unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

STATE OF NEW MEXICO)
)
COUNTY OF SAN JUAN)

I, Mack M. Mahaffey, being first duly sworn upon my oath depose and say as follows:

I am an employee of Baker Oil Tools, Inc., and that on February 7, 1960, I was called to the location of the El Paso Natural Gas Company Rincon Unit No. 130 (MD) Well located in the NENE/4 of Section 32, Township 27 North, Range 6 West, N. M. P. M., for advisory service in connection with installation of a production packer. In my presence, a Baker Model "D" Production Packer was set in this well at 6668 feet in accordance with the usual practices and customs of the industry.

Mack M. Mahaffey

Subscribed and sworn to before me this 29th day of March, 1960.

Lawrence Chris Hall
Notary Public in and for San Juan County,
New Mexico

My commission expires June 21, 1961.

T-27-N
R-6-W

Section 29
E.P.N.G.

E.P.N.G.

Rincon Unit
E.P.N.G.

Sec. 28

Rincon U.

Sec. 32

Sec. 33

Southern
Petroleum
Exploration

24

25

Rincon Unit

Caulkins

Mead

Caulkins

1-B

49

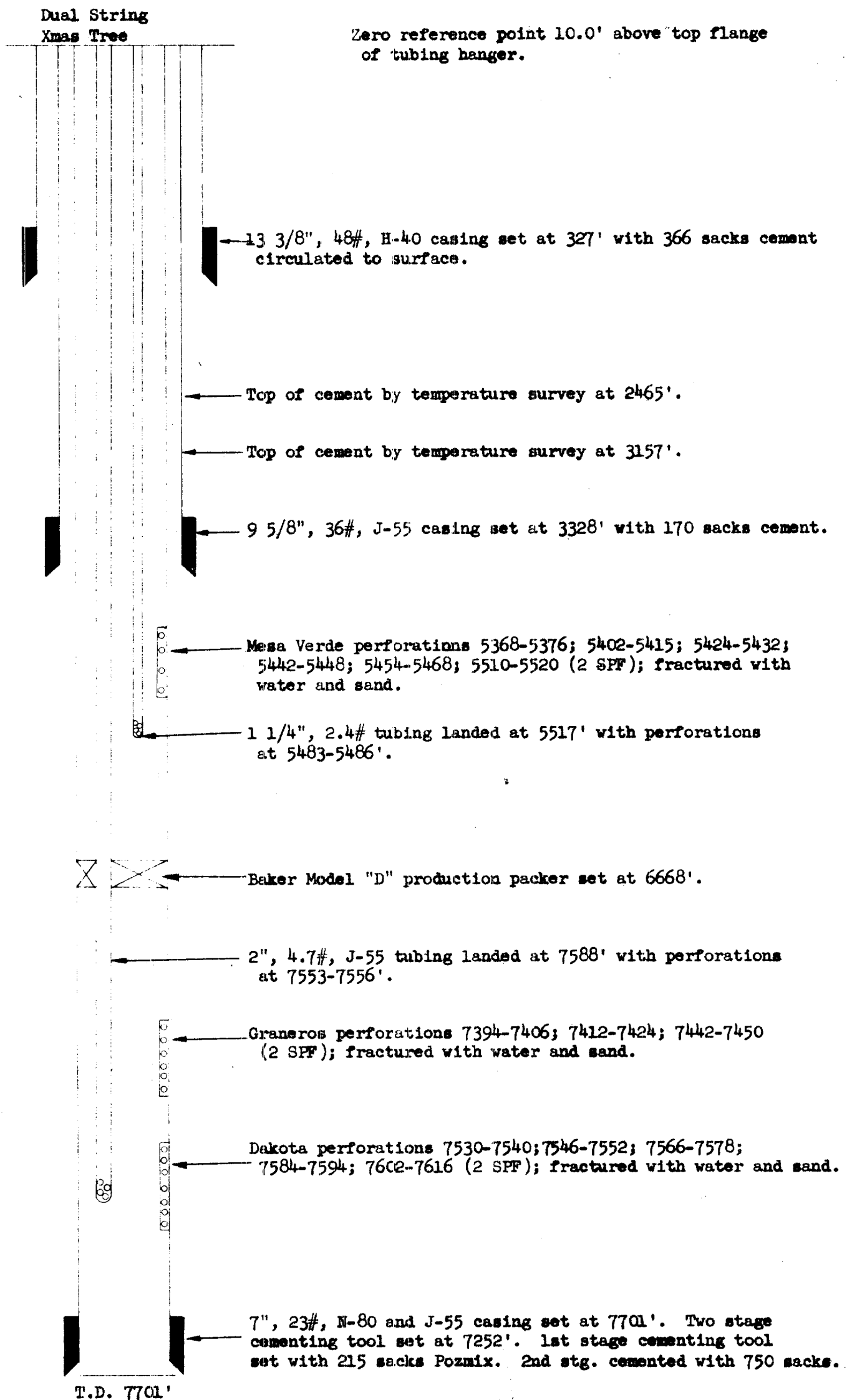
25

Section 5

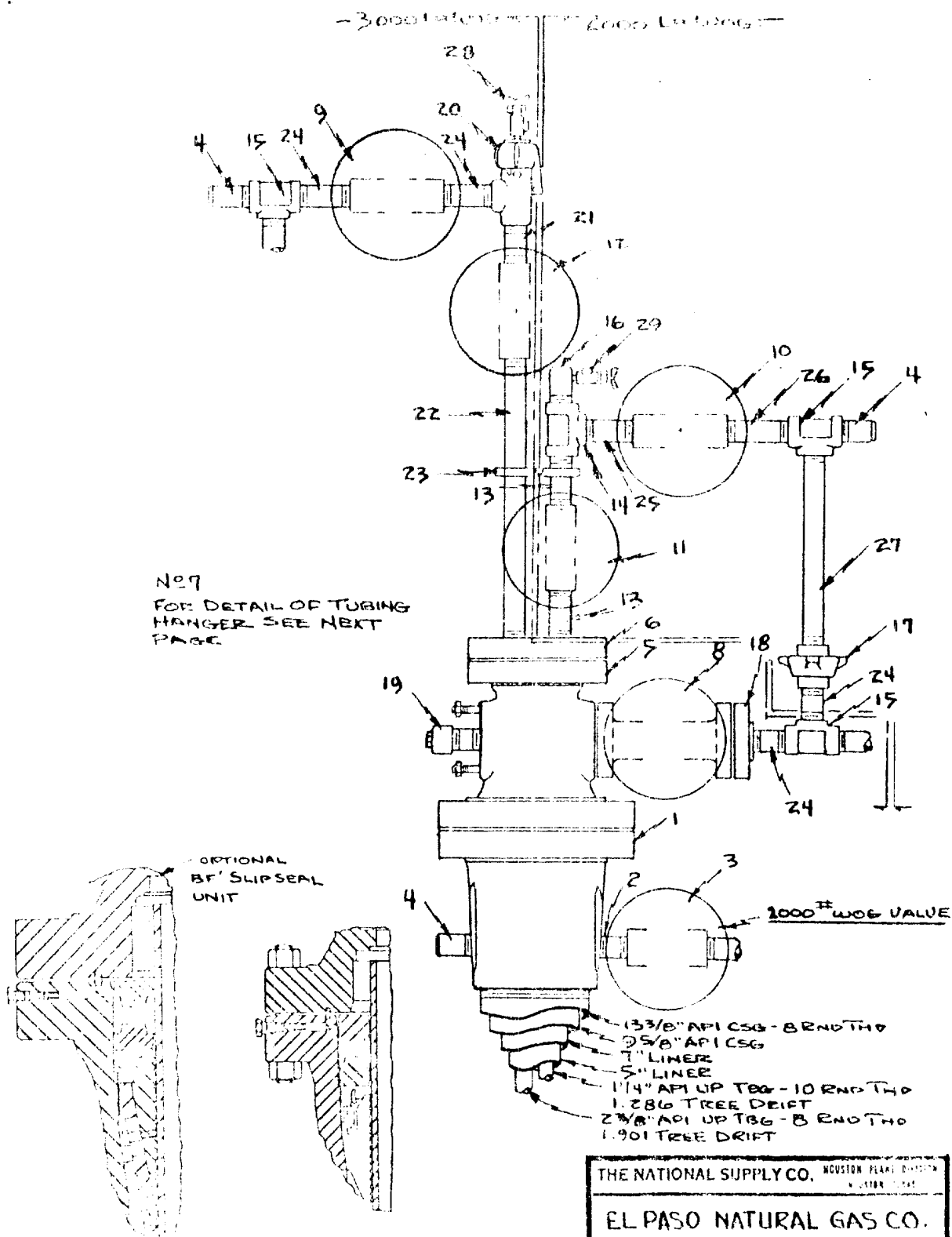
T-26-N
R-6-W
Sec. 4

FORM 7-132R (10-55)

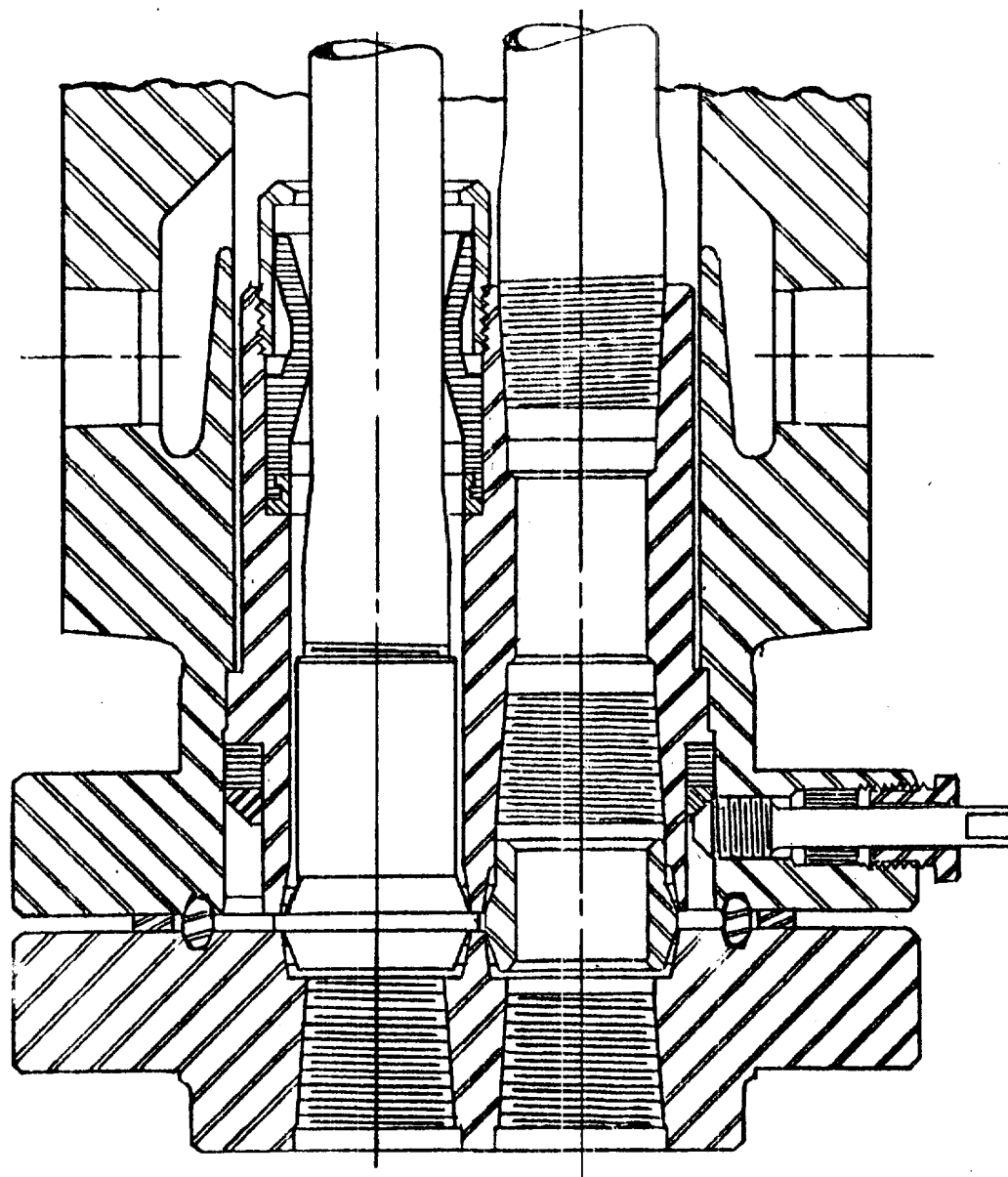
SCHEMATIC DIAGRAM OF DUAL COMPLETION
El Paso Natural Gas Co. Rincon Unit No. 130 (MD)
NE/4 Section 32, T-27-N, R-6-W



T.D. 7701'



THE NATIONAL SUPPLY CO. HOUSTON PLANT DIVISION HOUSTON, TEXAS		
EL PASO NATURAL GAS CO.		
SCALE 3/4" = 1'-0"	SUPPLEMENTING	35690
DRAWN BY J.A.		



EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE

February 25, 1960

Operator El Paso Natural Gas Company		Lease Rincon Unit No. 130 (D)	
Location 990N, 990E; 32-27-6		County Rio Arriba	State New Mexico
Formation Dakota		Pool Undesignated	
Casing Diameter 7	Set At Feet 7701	Tool Joint Diameter 2	Set At Feet 7577
Pay Zone From 7394	To 7616	Test Depth 7701 c/o 7636	Shut In 2/11/60
Stratification Sand Water Frac.		Flow Through Tubing X	

Choke Size, Inches .75	Choke Constant 12.365	7" at 7701
Initial SIPT (MV) 1077	1089	2329 (Dak)
Final SIPC (MV) 1075	687	Calc. 1543
Gravity .9850	.75	1.068
		.670
		.9463

Initial SIPT (MV) = 1077 psig

Final SIPC (MV) = 1104 psig

Packer at 6668, Baker Model "D"

CHOKE VOLUME $Q = C \times P_1 \times F_1 \times F_g \times F_v$

$$Q = 12.365 \times 687 \times .9850 \times .9463 \times 1.068$$

8456

MCF/D

$$Q_{OF} = A_{OF} \left(\frac{P_1^2 - P_w^2}{P_1^2} \right)^n$$

$$A_{OF} = \left(\frac{5480281}{3062256} \right)^n$$

$$1.7896^{.73} \times 8456 = 1.5462 \times 8456$$

$$A_{OF} = 13,075 \text{ MCF/D}$$

TESTED BY **Tom B. Grant, J. B. Goodwin**

WITNESSED BY

Lewis D. Galloway
L. D. Galloway

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE February 18, 1960

Operator El Paso Natural Gas Company	Lease Rincon Unit No. 130 (M)
Location 990N, 990E; 32-27-6	County Rio Arriba State New Mexico
Formation Mesa Verde	Pool Blanco
Casing Diameter 7 Set At Feet 7701	Casing Diameter 1-1/4 Set At Feet 5506
Pay Zone From 5368 To 5520	Total Depth 7701 o/o 7636 Shut In 2/9/60
Simulation Method Sand Water Frac.	Flow Through Tubing X

Choke Size, Inches .75	Choke Constant, C 12.365	7" at 7701
Static Pressure, Casing 1066 (MV)	PSIG 12 PSIA 1078	Days Since 9
Flowing Pressure, P 65	PSIG 12 PSIA 77	Static Pressure, Tubing 1072 (MV)
Temperature 60 F	Fr. .75	Working Pressure, Pw 70
		Flow From Tubing 1.009
		Gravity 660 Fg .9535

Initial SIPT Dak = 2322 psig
Final SIPT Dak = 2335 psig

Baker Model D packer at 6668

CHOKE VOLUME $Q = C \times P_r \times F_p \times F_g \times F_v$

$$Q = 12.365 \times 77 \times 1.0000 \times .9535 \times 1.009$$

916

MCF/D

OPEN FLOW $A_{of} = Q \left(\frac{P_r^2}{P_w^2} \right)^n$

$$A_{of} = \left(\frac{1175056}{1168332} \right)^n$$

$$1.0057^{.75} \times 916 = 1.0043 \times 916$$

A_{of} = 920

MCF/D

TESTED BY **Tom Grant**

WITNESSED BY

Lewis D. Galloway
L. D. Galloway